

## FACT SHEET

# Young Children in Deep Poverty

Mercedes Ekono | Yang Jiang | Sheila Smith

January 2016



National Center for Children in Poverty

The National Center for Children in Poverty (NCCP) is a non-partisan public policy research center at Columbia University's Mailman School of Public Health. Founded in 1989 with endowments from the Carnegie Corporation of New York and the Ford Foundation, NCCP is dedicated to promoting the economic security, healthy development, and well-being of America's low-income children and families. Using research to inform policy and practice, the center seeks to advance family-oriented solutions and the strategic use of public resources at the state and national levels to produce positive outcomes for the next generation.

## YOUNG CHILDREN IN DEEP POVERTY

### ABOUT THE AUTHORS

Mercedes Ekono is Data Analyst; Yang Jiang is Senior Research Associate; and Sheila Smith is Director, Early Childhood at NCCP.

### ACKNOWLEDGMENTS

This publication was made possible by the generous support of The Alliance for Early Success. The authors thank Renée Wilson-Simmons, Curtis Skinner, and Yumiko Aratani for reading and commenting on the draft, and Diana Gazzia for design and production.

### SUGGESTED CITATION

Ekono, M., Yang, J., & Smith, S. (2016). *Young Children in Deep Poverty*. New York: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.

# Young Children in Deep Poverty

Mercedes Ekono | Yang Jiang | Sheila Smith

January 2016

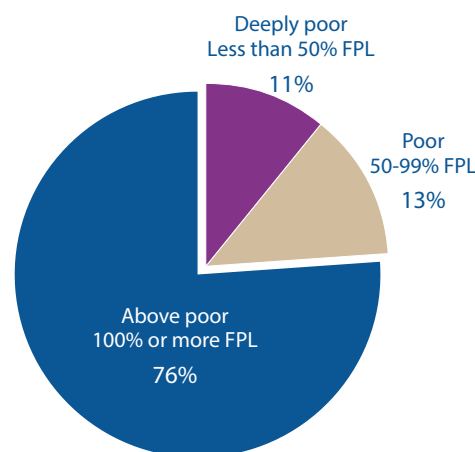
## Introduction

A U.S. family of three living in deep poverty survives on an annual income below \$9,276, or less than \$9.00 a day per family member. The struggle to raise children on such a meager income is not a rare circumstance among U.S. families, especially those with young children. Currently, 11 percent of young children (0-9 years) live in households with incomes below 50 percent of the federal poverty line (FPL), up from 9 percent in 2008.<sup>1</sup> The percentage of young children in deep poverty varies across the states, from 5 percent in North Dakota to 18 percent in Mississippi, 16 percent in South Carolina, and 14 percent in Kentucky and West Virginia.<sup>2</sup> (See Appendix A.)

While the negative effects of poverty on children's early development and long-term school and health outcomes are well documented,<sup>3, 4</sup> less is known about the well-being and family circumstances of young children in the subgroup of families with the scarcest financial resources, especially relative to other income groups. This fact sheet compares the early health, development, and risk characteristics of young children in deep poverty to children in families that are poor, but not deeply poor, and to families that are not poor. These groups, defined by family income, are:

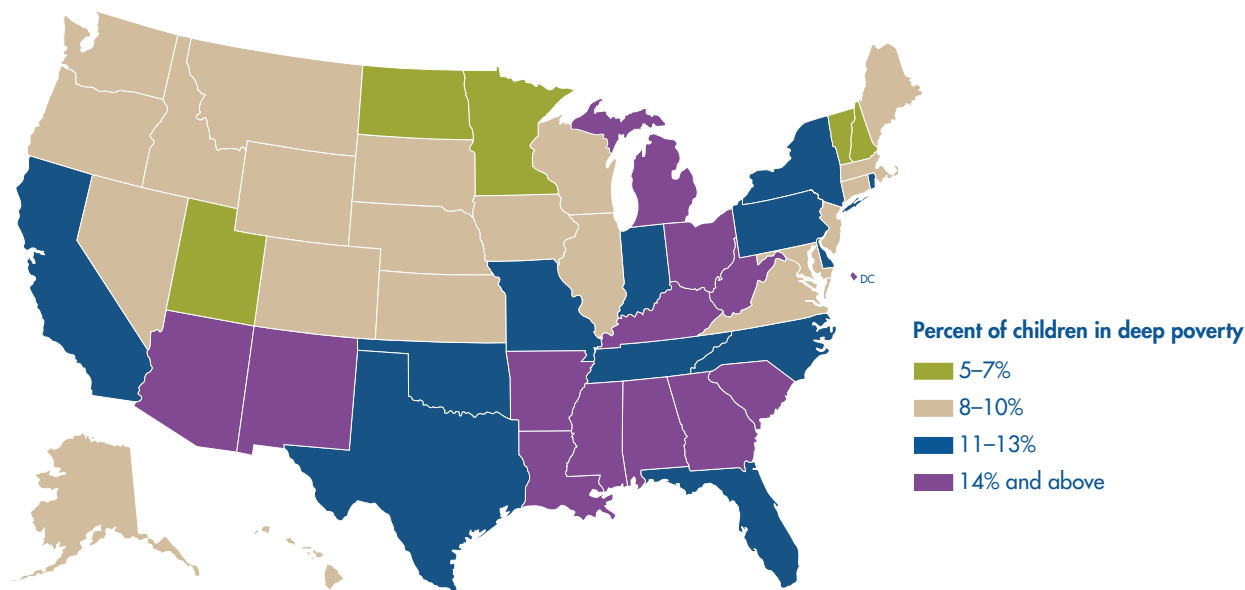
- ◆ Young children in deep poverty (family income is below 50 percent of the FPL)
- ◆ Young children who are poor, but not in deep poverty (family income is 50 percent of the FPL to 99 percent of the FPL)
- ◆ Young children who are not poor (family income is 100 percent or more of the FPL)

**Figure 1: U.S. Children under age 9 in families experiencing economic hardship**



Source: NCCP analysis of data from the American Community Survey (ACS) 2013.

**Figure 2: U.S. state variation in children under age 9 living in deep poverty**



Source: NCCP analysis of data from the American Community Survey (ACS) 2011-2013.

This fact sheet provides the following information about young children and families in these groups.

- ◆ Prevalence of children experiencing selected health and developmental conditions
- ◆ Prevalence of children whose parents have characteristics that pose risks for development
- ◆ Prevalence of children whose neighborhoods present challenges to parenting and development

The second section of the fact sheet focuses on young children in deep poverty with and without additional family risk factors. The prevalence of young children with negative mental health and development indicators is compared across deeply poor children whose parents experience fair to poor parent health and other adversities, and children in families without these difficulties. Results reported in this section suggest that even within a vulnerable group—young children in deep poverty—certain family adversities may increase children’s risk of poor mental health and development.

## Methods

This fact sheet used 2011–2013 data from four nationally representative data sets: the American Community Survey (ACS), the National Health and Nutrition Examination Survey (NHANES), the National Health Interview Survey (NHIS), and the National Survey of Children's Health (NSCH). The ACS data set was used to identify family, neighborhood, and demographic characteristics of children at different income levels, while NHANES, NHIS, and NSCH data sets were used to identify the child health, social-emotional/mental health, and developmental status of children at different income levels.

The analyses focused on children under age 9. However, age ranges vary for different health and development measures according to their use in surveys and appropriateness for specific ages. In most cases, the data collected in the surveys were based on parent report; exceptions are obesity and lead blood levels, which were directly measured. The first set of analyses showed the percentages, across the three income groups, of children with selected child or family characteristics (e.g., child health, parent education). The cases were weighted to ensure their representativeness in the national population. The second set of analyses focused on young children in deep poverty exclusively and examined the percentage of children with negative mental health and development indicators across groups in which parents reported the presence or absence of risk factors such as poor or fair parent health or parenting stress.

# I. Comparing children across three groups: Deep poverty, Poverty, Non-Poor

## Child Health Status

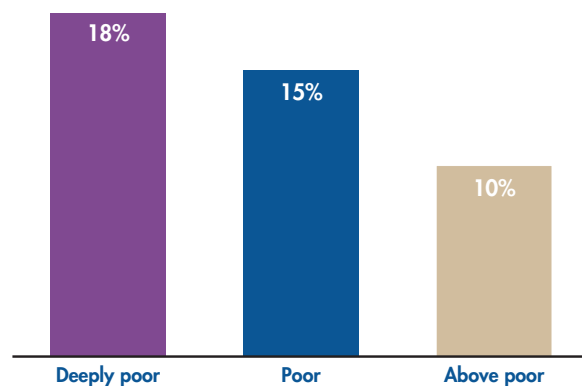
Childhood obesity is associated with both psychological problems in childhood and adolescence and poor health outcomes.<sup>5,6</sup> Nearly twice as many young children in deep poverty are obese compared to non-poor children age 2-9 years. The percentage of children who are obese among young children in deep poverty is higher than the percentage of children who are obese among young, poor children. Eighteen percent of deeply poor, 15 percent of poor, and 10 percent of above poor 2-9 year olds are obese.

Elevated blood lead levels in children are associated with serious behavior and learning problems and lower academic achievement.<sup>7,8,9,10,11</sup> The percentage of young children in deep poverty who have elevated lead levels is three times higher than the percentage for poor children, and over 17 times higher than the percentage for non-poor children.

## Child Mental Health and Development Status

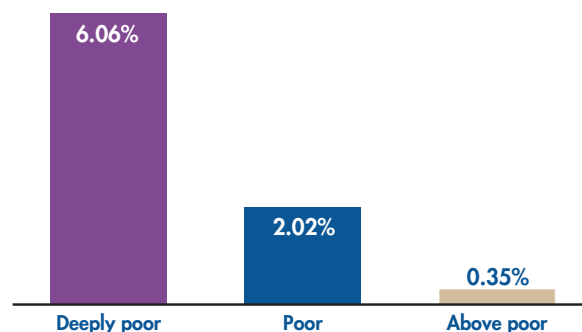
The prevalence of diagnosed depression and anxiety in children, as reported by parents, appears similar among deeply poor, poor, and non-poor 2-9 year olds (in the range of 1 to 2 percent for depression and 2 to 3 percent for anxiety). Deeply poor and poor 6-9 year olds show about double the prevalence of parent-reported child stress as non-poor children.

Figure 3: Child obesity by poverty status for children age 2-9



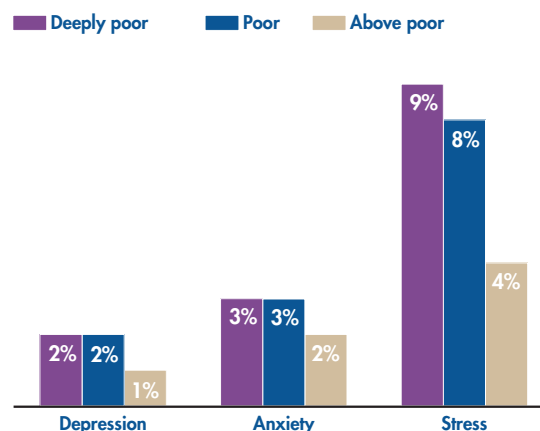
Source: NCCP analysis of data from the National Health and Nutrition Examination Survey (NHANES) 2011-2012.

Figure 4: Lead levels in the blood of children age 1-9



Source: NCCP analysis of data from the National Health and Nutrition Examination Survey (NHANES) 2011-2012.

Figure 5: Child mental health by poverty status for children age 2-9\*



Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012.  
\*Child stress is among children 6-9 years; Source: NCCP analysis of data from the National Health Interview Survey (NHIS) 2012

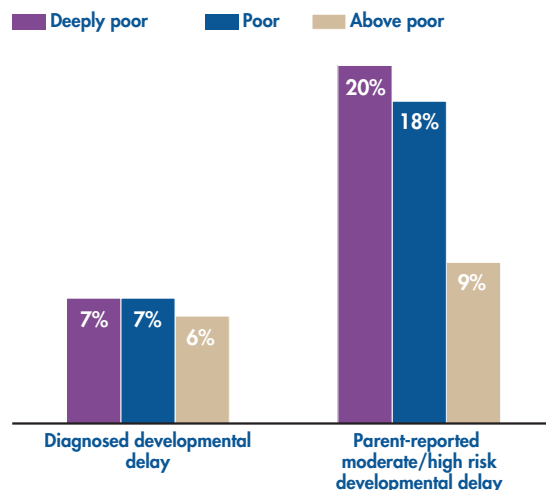
The prevalence of a diagnosed developmental delay in children, as reported by parents, is similar among deeply poor, poor, and non-poor 2-9 year olds; the prevalence is 7 percent among deeply poor and poor children and 6 percent for non-poor children. However, about twice as many deeply poor and poor parents reported that their children are at-risk for developmental delays as parents of non-poor children (20 percent for deeply poor, 18 percent for poor, and 9 percent for non-poor children). Parents' report of risk for developmental delay is based on a set of questions asking about the parent's concern regarding different aspects of the child's learning and behavior (see Appendix B).

The prevalence of children age 6 months to 5 years, viewed by parents as "flourishing," is under 50 percent for deeply poor children; this percentage rises to 62 percent for poor children, and rises further to 72 percent for non-poor children. (The child's score for "flourishing" reflects the parent's perception of the child as affectionate, curious, laughing, and able to bounce back after a disappointment.) The prevalence of children age 6 to 9 years, viewed by parents as "flourishing," was similarly low for deeply poor (37 percent) and poor children (36 percent) compared to non-poor children (51 percent).

### *Parent Characteristics that May Pose Risks for Children*

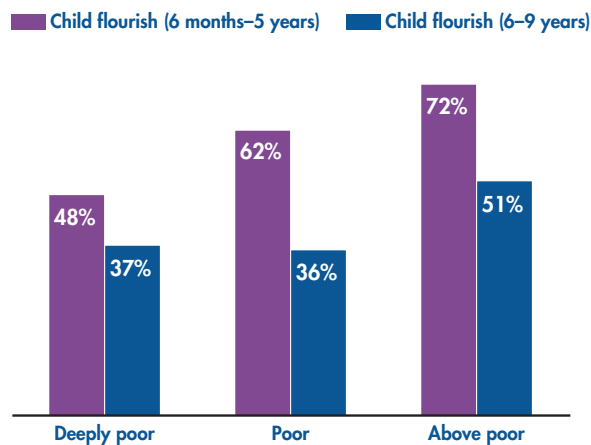
Less than one-third of children in deep poverty live in households headed by a married parent (29 percent). This percentage rises to 43 percent for poor children and to 76 percent for non-poor children.

**Figure 6: Child development by poverty status for children age 2-9\***



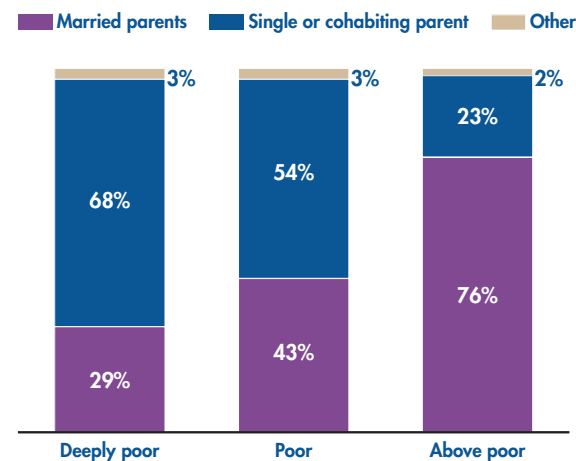
\*Note: Parent-reported moderate/high risk for delays is among children 4 months to 5 years  
Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012

**Figure 7: Child flourish by poverty status**



Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012

**Figure 8: Family structure by poverty status for children 0-9\***



Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012  
\*Note: Other means the child was not living with a biological parent.



Three times as many deeply poor and poor parents of young children, under 9 years, lack a high school diploma as non-poor parents of young children. While 40 percent of deeply poor parents and 39 percent of poor parents of young children have less than a high school education, only 12 percent of non-poor parents of young children lack a high school degree.

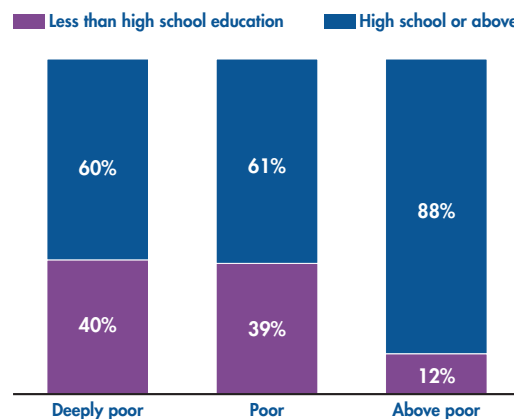
Among children in deep poverty, 24 percent have mothers in fair or poor physical health, a higher percentage than children in poverty (19 percent), and over three times as many as non-poor children (7 percent).

Mothers of deeply poor children report fair/poor mental health over three times as often as mothers of poor children. Similarly, the highest percentage of parents reporting frequent parenting stress were those of deeply poor children (21 percent), followed by parents of poor children (15 percent), and parents of non-poor children (7 percent).

### Neighborhood Characteristics

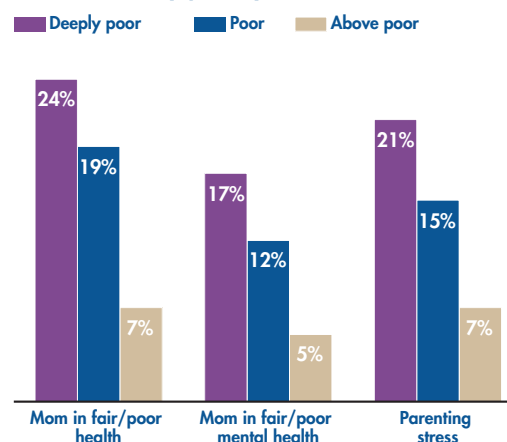
Parents of children in deep poverty reported the most negative views of their neighborhoods. Among these parents, 75 percent reported having people they could count on in their neighborhood for help; this percent rises to 81 percent for poor parents and to 89 percent for non-poor parents. The percent of parents who feel their child lives in a safe neighborhood is lowest for deeply poor parents (71 percent), slightly higher for poor parents (76 percent), and highest for non-poor parents (90 percent).

**Figure 9: Parental educational attainment by poverty status for children 0-9**



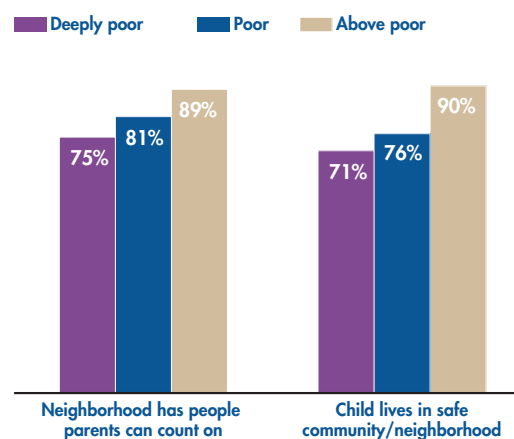
Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012

**Figure 10: Maternal health, mental health, and parenting stress by poverty status for children 0-9**



Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012

**Figure 11: Neighborhood characteristics by poverty status for children 0-9**



Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012

## II. Comparing young children in deep poverty with and without additional risk factors

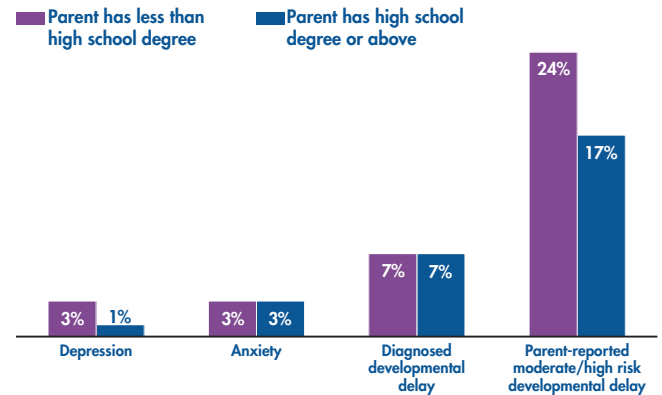
### *Child mental health and development status by parent characteristics*

Among deeply poor children age 2 to 9, the percentage of children with diagnosed depression, anxiety, and developmental delay are similar across families in which the parent has or does not have a high school degree. However, parents' report of the child's moderate to high risk of a developmental delay is higher among parents without a high school degree (24 percent) compared to parents with a high school degree (17 percent).

Compared to mothers in excellent or good health, more mothers in fair to poor health reported that their deeply poor children had depression (6 percent vs. 1 percent) and anxiety (7 percent vs. 2 percent). Deeply poor children of mothers in fair/poor health were over twice as likely to have a diagnosed developmental delay (11 percent vs. 4 percent) or be at a moderate/high risk of development delay (35 percent vs. 15 percent) compared to deeply poor children of mothers in good health.

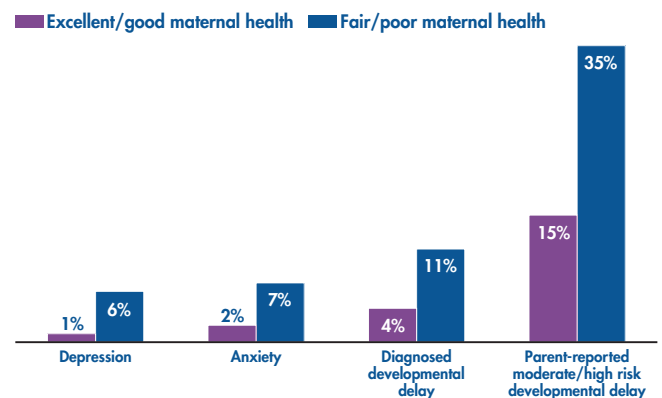
A higher prevalence of depression (6 percent) and anxiety (7 percent) was found among deeply poor children of mothers reporting fair or poor mental health, compared to deeply poor children of mothers in excellent/good mental health (2 percent for both depression and anxiety). Deeply poor children of mothers in fair or poor mental health were twice as likely to have a diagnosed developmental delay or be at moderate/high risk of developmental delay, compared to deeply poor children with mothers in excellent/good mental health.

**Figure 12: Child mental health and development by parent education for children 2-9\***



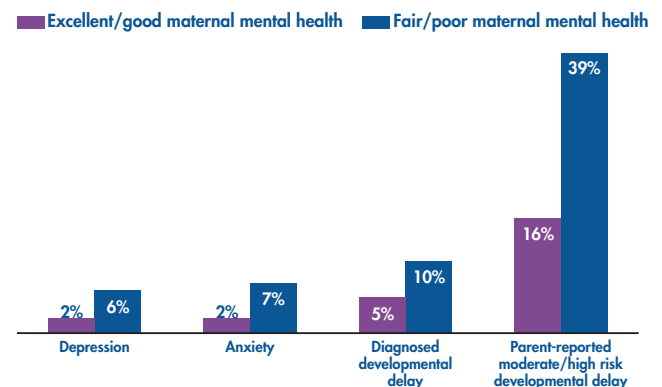
\*Note: Parent-reported moderate/high risk for delays is among children 4 months to 5 years  
Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012

**Figure 13: Child mental health and development by maternal health for children 2-9\***



\*Note: Parent-reported moderate/high risk for delays is among children 4 months to 5 years  
Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012

**Figure 14: Child mental health and development by maternal mental health for children 2-9\***



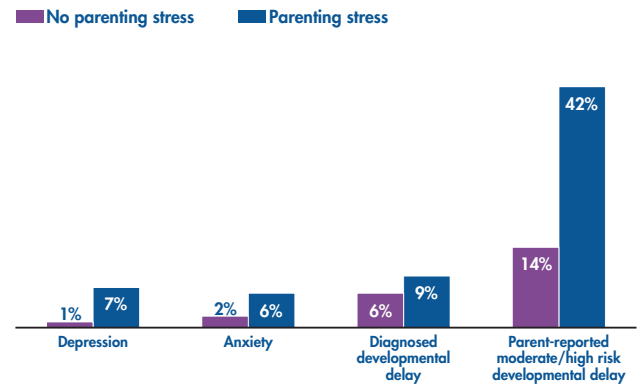
\*Note: Parent-reported moderate/high risk for delays is among children 4 months to 5 years  
Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012



The percentage of deeply poor children with depression was seven times higher among children whose parents reported frequent parenting stress (7 percent) than among children whose parents reported infrequent parenting stress (1 percent). Similarly, the percentage of children with anxiety was three times greater for children with frequently stressed parents (6 percent vs. 2 percent). A somewhat higher percentage of children with stressed parents was reported to have a diagnosed developmental delay (9 percent vs. 6 percent). The percentage of children with stressed parents who reported their child was at moderate to high risk for developmental delay was three times higher than the percentage of children with infrequently stressed parents (42 percent vs. 14 percent).

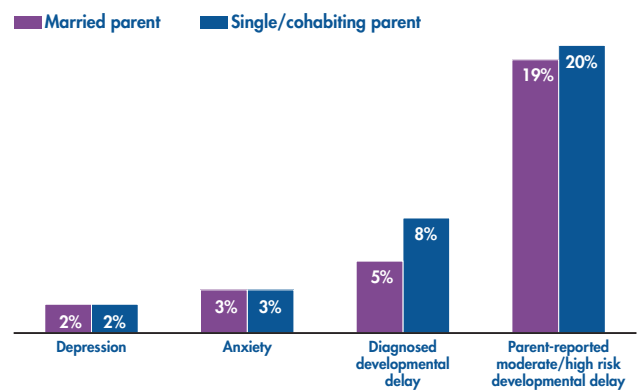
Deeply poor children of married and single or cohabitating parents show a similar prevalence of parent-reported diagnosed depression, anxiety, and moderate to high risk of developmental delay. Children in deep poverty with single or cohabitating parents were slightly more likely to have a diagnosed developmental delay (8 percent vs. 5 percent), compared to deeply poor children of married parents.

**Figure 15: Child mental health and development by parenting stress for children 2-9\***



\*Note: Parent-reported moderate/high risk for delays is among children 4 months to 5 years  
Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012

**Figure 16: Child mental health and development by family structure for children 2-9\***



\*Note: Parent-reported moderate/high risk for delays is among children 4 months to 5 years  
Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012

Lower percentages of deeply poor parents who lack a high school degree reported that their children show signs of developmental “flourishing” (e.g., curiosity about learning, affection, bouncing back after disappointment) compared to parents with at least a high school degree (46 percent vs. 50 percent for younger children; 36 percent vs. 39 percent for older children).

Compared to deeply poor parents in good health, a lower percentage of deeply poor parents in fair or poor health report that their children show signs of flourishing, especially among children 6 months to 5 years (35 percent vs. 50 percent for younger children; 35 percent vs. 40 percent for older children).

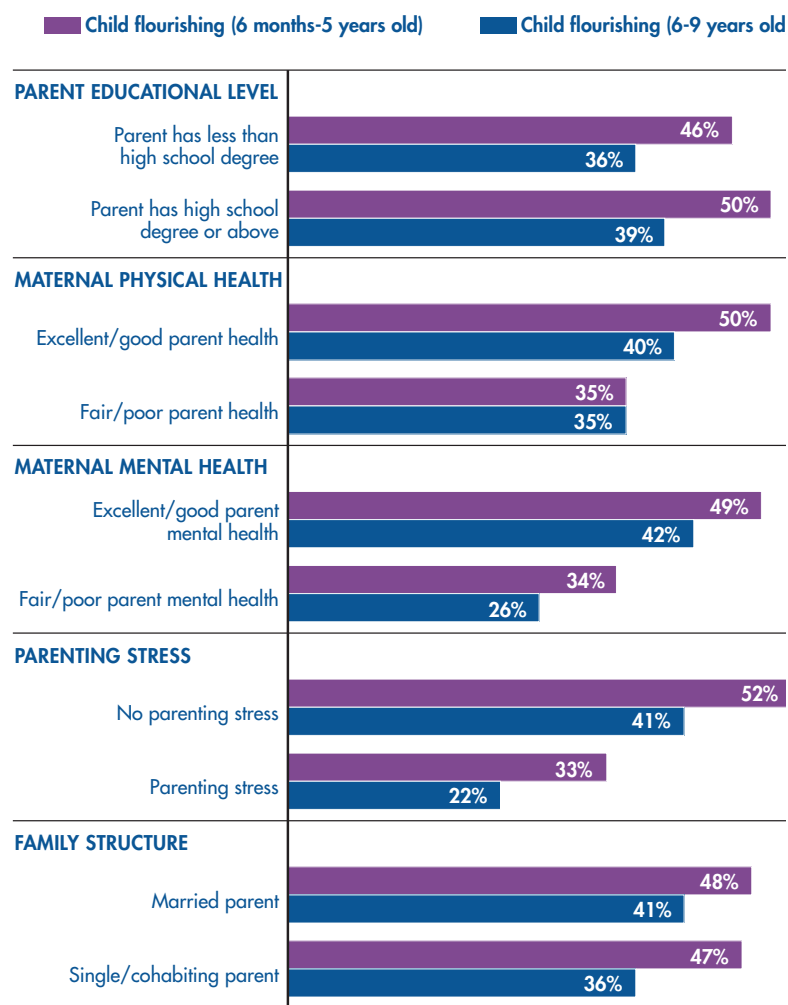
Among deeply poor parents in fair or poor mental health, a lower percentage described their children

as flourishing, compared to parents in good mental health (34 percent vs. 49 percent for younger children; 26 percent vs. 42 percent for older children).

The prevalence of children described by their parents as flourishing is lower among children with deeply poor parents experiencing frequent parenting stress, compared to parents reporting less stress (33 percent vs. 52 percent for younger children; 22 percent vs. 41 percent for older children).

Similar percentages of married and single or cohabitating parents of young children reported that their children are flourishing (48 percent and 47 percent), while unmarried parents of older children were less likely to report that their children are flourishing (36 percent vs. 41 percent).

**Figure 17: Child flourishing by parental characteristics**



Source: NCCP analysis of data from the National Survey of Children's Health (NSCH) 2011-2012

---

## Conclusion and Recommendations

Results of the descriptive analyses show that on almost every indicator, higher percentages of young children in both poverty and deep poverty have poor outcomes, compared to non-poor children. The biggest differences in the health and development of young children are evident in comparisons of non-poor children with those who are poor and deeply poor. However, young children in deep poverty fared even worse than poor children on several health and development indicators, most notably blood lead levels, obesity, and parents' assessment of whether children are "flourishing," a composite measure reflecting children's curiosity, resilience, affection, and positive mood.

Young children in deep poverty also appear to be at higher risk for future health and development problems, based on the presence of family adversities. Compared to young children in poverty, a higher percentage of young children in deep poverty have parents who are experiencing poor or fair health or mental health, frequent parenting stress, and a lack of perceived social support and security in the family's neighborhood. These family adversities have been shown to predict poor health and development outcomes in young children.<sup>12, 13, 14</sup>

The results also point to especially vulnerable groups of young children in deep poverty. A higher percentage of deeply poor young children with parents experiencing less optimal health or mental health, or frequent parenting stress, were described by parents as having depression, anxiety, a diagnosed developmental delay, and being at high to moderate risk of developmental delay, compared to deeply poor children whose parents reported greater well-being. In each case, deep poverty coupled with a parent risk factor was associated with poor developmental and mental health outcomes for young children.

### *Safety Net Policies*

Policymakers should consider several remedies to reduce the developmental and health toll that deep poverty is taking on the nation's youngest children.

First, safety net policies, including both cash (e.g., Temporary Assistance for Needy Families - TANF, unemployment insurance) and non-cash benefits (e.g., food stamps, housing subsidies, public health insurance) should be strengthened in ways that help families cope with spells of severe economic hardship. There is currently wide variation in states' safety net policies, leaving families with young children in some states much more vulnerable to deep poverty and its negative effects on early development. Improvements in public health insurance and TANF, in particular, could play a critical role in reducing the developmental harm associated with poverty. The absence of Medicaid expansion in 20 states means that many parents with incomes below 50 percent of the poverty line, but above current Medicaid eligibility thresholds, will be unable to obtain treatment for health and mental health conditions that are associated with poor outcomes for children.<sup>15</sup> These states should expand Medicaid for the benefit of both parents and their young children's health and development.

Monthly TANF benefits are below \$300 a month for a family of three in 14 states, leaving families with too little cash to meet basic needs. Restrictive eligibility rules, including very low income thresholds in many states, severely limit the number of families who currently participate in TANF.<sup>16</sup> States should consider raising both benefit levels and income eligibility thresholds to lift families out of deep poverty, and provide additional supports, discussed next, to promote children's development and family economic security. [NCCP's 50-State Policy Tracker](#) can help policymakers examine features of these and other safety net benefits in their state and others.

### *Coordination of Benefits*

Another strategy that would support the well-being of families with young children in deep poverty is the coordination of benefits through the design of streamlined procedures for helping families easily enroll in multiple benefit programs. A recent brief by the Center

for Law and Social Policy (CLASP) provides recommendations for connecting families with infants who are receiving TANF to a range of other programs, including WIC (Special Supplemental Nutrition Program for Women, Infants, and Children), housing assistance, Medicaid, home visiting, and Early Head Start.<sup>17</sup> This approach should be extended to all deeply poor families with young children and include education and job programs for parents, as well as high quality early care and education for preschoolers.

### ***Evidence-Based Interventions***

A final policy strategy is investment in the expansion of evidence-based interventions that intentionally target young children in deep poverty and other highly vulnerable groups. The community-based model, Child First, targets children from the prenatal period through age five and is designed to serve the most vulnerable families with young children within a community, including families experiencing severe economic hardship, socially isolated families, and families in which

parents experience mental health problems.<sup>18</sup> A central agency that implements the model and a community-based collaborative comprised of child and adult service providers help participating families gain access to needed services, including evidence-based parent-child interventions, Early Head Start, home visiting, and practical supports such as financial, housing, and food assistance. Child First has demonstrated reductions in families' involvement in child protective services and positive impacts on parent and child mental health, children's language development, and families' access to needed services.<sup>19</sup> Child First has 15 program sites in Connecticut and is currently expanding to other states with a careful plan for maintaining fidelity to its model. As new two-generation, home-visiting, and other early intervention programs that target vulnerable families are developed and evaluated, there will likely be a wider range of models that will demonstrate benefits for families with young children in deep poverty.

---

## **Data Sources**

Disclosure: The findings and conclusions in this paper are those of the author(s) and do not necessarily represent the views of the Research Data Center, the National Center for Health Statistics, or the Centers for Disease Control and Prevention. A restricted income variable, allowing the designation of the extremely poor group, and parent marriage variables were used in the data analysis of the National Survey of Children's Health 2011 dataset.

United States Census Bureau. "Summary File." 2011–2013 American Community Survey. U.S. Census Bureau's American Community Survey Office, 2014. Accessed March 2015.

United States Census Bureau. "Summary File." 2013 American Community Survey. U.S. Census Bureau's American Community Survey Office, 2014. Accessed March 2015.

National Center for Health Statistics, 2015. Research Data Center. National Survey of Children's Health, 2011. Accessed Jan-March 2015.

National Center for Health Statistics. National Health Interview Survey, 2012. Public-use data file and documentation. [http://www.cdc.gov/nchs/nhis/nhis\\_2012\\_data\\_release.htm](http://www.cdc.gov/nchs/nhis/nhis_2012_data_release.htm). Accessed March 2015.

Centers for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). National Health and Nutrition Examination Survey Data 2011-2012. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Accessed 2015. [http://wwwn.cdc.gov/nchs/nhanes/search/nhanes11\\_12.aspx](http://wwwn.cdc.gov/nchs/nhanes/search/nhanes11_12.aspx)

## Appendix A

### *Percentage and Number of Children in Deep Poverty by State, 2012*

State	Percentage and number of families with children under 9 years in deep poverty
ALABAMA	15% (79,133)
ALASKA	9% (8,075)
ARIZONA	14% (107,923)
ARKANSAS	14% (46,579)
CALIFORNIA	11% (463,619)
COLORADO	8% (50,601)
CONNECTICUT	8% (29,218)
DELAWARE	11% (10,145)
DISTRICT OF COLUMBIA	16% (9,731)
FLORIDA	12% (231,696)
GEORGIA	14% (166,891)
HAWAII	8% (12,477)
IDAHO	9% (17,935)
ILLINOIS	10% (142,812)
INDIANA	12% (92,829)
IOWA	9% (30,490)
KANSAS	8% (30,236)
KENTUCKY	14% (70,685)
LOUISIANA	15% (83,206)
MAINE	9% (11,440)
MARYLAND	8% (51,901)
MASSACHUSETTS	8% (54,199)
MICHIGAN	14% (142,448)
MINNESOTA	7% (44,227)
MISSISSIPPI	18% (63,743)
MISSOURI	12% (80,703)

State	Percentage and number of families with children under 9 years in deep poverty
MONTANA	10% (10,661)
NEBRASKA	9% (20,831)
NEVADA	10% (32,677)
NEW HAMPSHIRE	7% (8,232)
NEW JERSEY	8% (80,220)
NEW MEXICO	17% (40,740)
NEW YORK	11% (225,683)
NORTH CAROLINA	13% (146,698)
NORTH DAKOTA	5% (4,369)
OHIO	14% (169,899)
OKLAHOMA	12% (57,793)
OREGON	10% (42,725)
PENNSYLVANIA	11% (134,663)
RHODE ISLAND	11% (11,323)
SOUTH CAROLINA	16% (81,687)
SOUTH DAKOTA	9% (9,561)
TENNESSEE	13% (94,035)
TEXAS	12% (404,564)
UTAH	6% (27,809)
VERMONT	6% (3,296)
VIRGINIA	8% (69,732)
WASHINGTON	9% (66,351)
WEST VIRGINIA	14% (26,011)
WISCONSIN	8% (50,832)
WYOMING	8% (5,582)

---

## Appendix B

### *Definitions of Variables from National Surveys*

**Anxiety (2-9 years):** Parents were asked if they had ever been told by a doctor or other health care provider that their child has anxiety. Anxiety is a feeling of constant worrying. Children with severe anxiety problems may be diagnosed as having anxiety disorders. Anxiety disorders include panic disorder, obsessive-compulsive disorder, post-traumatic stress disorder, and phobias.

**Child Flourish (6 Months-5 Years):** Parents were asked about their child's behavior and interactions with others. This variable is constructed using four questions. In each of the four questions, parents were asked to categorize how frequently the behavior occurred, choosing one of the following six responses: Never, Rarely, Sometimes, Usually, Always, Don't know.

1. [He/She] is affectionate and tender with you. Would you say this is true for [specific child] during the past month?
2. [He/She] bounces back quickly when things don't go [his/her] way. Would you say this is true for [specific] during the past month?
3. [He/She] shows interest and curiosity in learning new things. Would you say this is true for [specific child] during the past month?
4. [He/She] smiles and laughs a lot. Would you say this is true for [specific child] during the past month?

**Child Flourish (6-9 Years):** Parents were asked about their child's behavior and interactions with others. This variable is constructed using three questions. Based on parent responses, children were categorized as flourishing in all three areas, two areas, or one or no areas.

1. [He/She] finishes the tasks [he/she] starts and follows through with what [he/she] says [he'll/she'll] do. Would you say this is true for [specific child] during the past month?

2. [He/She] stays calm and in control when faced with a challenge. Would you say this is true for [specific child] during the past month?
3. [He/She] shows interest and curiosity in learning new things. Would you say this is true for [specific child] during the past month?

**Child Stress (6-9 Years):** Parents were asked if their child felt stressed during the past 12 months. Parents responded: Yes, No, or Refused.

**Depression (2-9 years):** Parents were asked if they had ever been told by a doctor or other health care provider that their child has depression. Depression is an illness that involves the body, mood, and thoughts. It is marked by persistent sadness or an anxious or empty mood. It affects how a person feels, and the way a person eats, sleeps, and functions.

**Developmental Delay (2-9 years):** Parents were asked if they had ever been told by a doctor or other health care provider that their child had a developmental delay. A child with a developmental delay does not achieve certain skills as quickly as other children of the same age. A developmental delay is a major delay in motor, language, social, or thinking skills.

**Educational Attainment (under 9 years):** Parents were asked the highest level of education they had completed. Answers were categorized as "Less than high school education" and "High school graduate or above." If both parents participated in the survey, the highest level of education between the two was reported for parental education attainment.

**Family Structure (under 9 years):** Parents were asked about their current marriage/living status. Parents were categorized as married, single or cohabitating, or other (child living with non-biological parent or without a parent in the household).

**Lead Level (1-9 years):** A sample of each child's blood was taken and used to determine the child's blood lead level. Blood lead levels were considered elevated



if the lead level was higher than 5.0  $\mu\text{mol/L}$ , which the CDC uses as the cutoff point to identify children who have had lead exposure and require case-management, steps to prevent further exposure, and possible treatment.<sup>20</sup>

**Mother's Health (under 9 years):** Mothers were asked to self-report the state of their current general health. They classified their general health as excellent, very good, good, fair, or poor.

**Mother's Mental Health (under 9 years):** Mothers were asked to classify their mental and emotional health as excellent, very good, good, fair, or poor.

**Obesity (2-9 years):** Each child was weighed and measured to determine his/her body mass index. Based on their body mass index score, children were categorized as one of four body mass index categories; underweight, normal weight, overweight, or obese.

**Parenting Stress (under 9 years):** Parents were asked about how often they have experienced stress related to parenting within the past month. This variable is constructed using 3 questions. Parents who responded 'Usually' or 'Always' to at least one question were considered to have frequent parenting stress. Parents who responded 'Never', 'Rarely', or 'Sometimes' to all three questions were considered to have minimal to no parenting stress.

1. During the past month, how often have you felt [specific child] is much harder to care for than most children [his/her] age?
2. During the past month, how often have you felt [he/she] does things that really bother you a lot?
3. During the past month, how often have you felt angry with [him/her]?

**Risk for Developmental, Behavioral, or Social Delay (4 months-5 years).** This variable is constructed using nine questions that ask the parent about concerns he/she might have about the child's development. All parents were asked all nine questions. The first question was coded "concerned" if answered "yes" and "not concerned" if answered "no." The remaining eight

questions were coded as "concerned" if the parent responded "Concerned a lot" or "Concerned a little" and "Not concerned" if the parent responded "Not at all." Using the total sum score, children were categorized into 3 categories: No risk of delay, Low risk of delay (1-3 total score), Moderate risk of delay (4-6 total score); and High risk of delay (7-9 total score).

1. Do you have any concerns about your child's learning, development, or behavior?  
[Yes/No/Don't Know]
2. How [concerned are you about] how your child talks and makes speech sounds?  
[Concerned a lot, A little, Not at all, Don't Know] Same responses used in items 3-9.
3. How [concerned are you about] how your child understands what you say?
4. How [concerned are you about] how your child uses their hands and fingers to do things?
5. How [concerned are you about] how your child uses his/her arms and legs?
6. How [concerned are you about] how your child behaves?
7. How [concerned are you about] how your child gets along with others?
8. How [concerned are you about] your child learning to do things independently?
9. How [concerned are you about] how your child is learning pre-school or school skills?

**Someone in Neighborhood You Can Count On (under 9 years):** Parents were asked how much they agree or disagree with the following statement: "There are people I can count on in this neighborhood." Parents selected from the following options: "Definitely agree," "Somewhat agree," and "Definitely disagree."

**Safe Community/Neighborhood (under 9 years):** Parents were asked if they felt their child was safe in their community or neighborhood. Parents were asked to select from the following choices: Never, Sometimes, Usually, Always, or Don't know.

---

## End Notes

1. NCCP calculations of national American Community Survey (ACS) data (2008 – 2013)
2. NCCP calculations of state American Community Survey (ACS) data (2011 – 2013)
3. Brooks-Gunn, J & Duncan, Greg J. 'The Effects of Poverty on Children'. *The Future of Children*. 7:2. Summer-Autumn 1997. 55-71.
4. Duncan, G., Ziol-Guest, KM, & Kalil, A. 'Early-Childhood Poverty and Adult Attainment, Behavior, and Health'. *Child Development*. 81:1. Jan/Feb 2010. 306-325.
5. Pulgaron, Elizabeth R. 'Childhood Obesity: A Review of Increased Risk for Physical and Psychological Comorbidities'. *Clinical Therapeutics*. 35:1. Jan 2013. A18-A32.
6. Braet, Caroline, Mervielde, Ivan & Vandereycken, Walter. 'Psychological Aspects of Childhood Obesity: A Controlled Study in a Clinical and Nonclinical Sample'. *Journal of Pediatric Psychology*. 22:1. 1997. 59-71.
7. Needleman, Herbert L. , Schell, Alan, Bellinger, David, Leviton, Alan & Allred, Elizabeth N. 'The Long-Term Effects of Exposure to Low Doses of Lead in Childhood — An 11-Year Follow-up Report'. *The New England Journal of Medicine*. 322:2. 1990. 83-88.
8. Lanphear, BP, Dietrich, K, Auinger, P & Cox, C. 'Cognitive deficits associated with blood lead concentrations <10 microg/dL in US children and adolescents'. *Public Health Reports*. 115:6. Nov-Dec 2000. 521-529.
9. Jusko, T. A., Henderson Jr, C. R., Lanphear, B. P., Cory-Slechta, D. A., Parsons, P. J., & Canfield, R. L. (2008). Blood lead concentrations < 10 µg/dL and child intelligence at 6 years of age. *Environ Health Perspect*, 116(2), 243-248.
10. Bellinger, D. C. (2008). Very low lead exposures and children's neurodevelopment. *Current opinion in pediatrics*, 20(2), 172-177.
11. Lanphear, B. P., Hornung, R., Khourey, J., Yolton, K., Baghurst, P., Bellinger, D. C., ... & Roberts, R. (2005). Low-level environmental lead exposure and children's intellectual function: an international pooled analysis. *Environmental health perspectives*, 894-899.
12. Yoshikawa, H., Aber, J. L., & Beardslee, W. R. (2012). The effects of poverty on the mental, emotional, and behavioral health of children and youth: implications for prevention. *American Psychologist*, 67(4), 272.
13. Manuel, J. I., Martinson, M. L., Bledsoe-Mansori, S. E., & Bellamy, J. L. (2012). The influence of stress and social support on depressive symptoms in mothers with young children. *Social science & medicine*, 75(11), 2013-2020
14. Lima, J., Caughy, M., Nettles, S. M., & O'Campo, P. J. (2010). Effects of cumulative risk on behavioral and psychological well-being in first grade: Moderation by neighborhood context. *Social Science & Medicine*, 71(8), 1447-1454
15. For current information about Medicaid expansion, go to <http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/>
16. For information on variation across the states in TANF eligibility rules and benefits, go to NCCP's 50 State Policy Tracker.
17. Lower-Basch, E. and Schmit, S. (2015). TANF and the First Year of Life. Washington, DC: Center for Law and Social Policy.
18. For information about the Child First model and its implementation, go to <http://www.childfirst.com/our-work>
19. Lowell, D.I., Carter, A.S., Godoy, L., Paulicin, B., Briggs-Gowan, M.J. (2011). A Randomized Controlled Trial of Child First: A Comprehensive, Home-Based Intervention Translating Research into Early Childhood Practice. *Child Development*, 82(1), 193-208.
20. For information on current CDC policies related to children's blood lead levels, go to [http://www.cdc.gov/nceh/lead/acclpp/blood\\_lead\\_levels.htm](http://www.cdc.gov/nceh/lead/acclpp/blood_lead_levels.htm)

